

C 62699

(Pages : 2)

Name.....

Reg. No.....

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2014

(UG—CCSS)

Core Course—Biotechnology

BT 2B 01—GENERAL MICROBIOLOGY

Time : Three Hours

Maximum : 30 Weightage

I. Objective type questions. Answer *all* questions :

A. Multiple Choice :

1 Acid fast staining is used to stain :

- (a) Corynebacterium. (b) E.coli.
(c) Mycoplasma. (d) Actinomycetes.

2 Serum can be sterilized by :

- (a) Autoclaving. (b) Tyndallization.
(c) Pasteurization. (d) Filtration.

3 Which among the following is an enriched medium :

- (a) Nutrient agar. (b) Blood agar.
(c) Potato dextrose agar. (d) LB agar.

4 Which one is a spirochete :

- (a) Borrelia. (b) Vibrio.
(c) Nocardia. (d) Pseudomonas.

B. Fill in the blanks :

- 5 Microscope was invented by _____.
6 Undefined media are called _____.
7 Presence of bacterial capsule is demonstrated by _____ technique.
8 The site of action of penicillin is _____.

C. Answer in one word

- 9 The bacterium which is used as biopesticide.
10 The common media used for fungal cultivation.
11 E.coli phages are known as.
12 The organisms which reduce inorganic substance as their electron source are known as.

(12 × ¼ = 3 weightage)

Turn over

II. Short Answer type questions. Answer all *nine* questions :

- | | |
|-------------------------|--------------------------|
| 13 Dimorphism. | 14 Potato dextrose agar. |
| 15 Nucleocapsid. | 16 L-form. |
| 17 McIntosh Fildes Jar. | 18 Capsule. |
| 19 Psychrophiles. | 20 Cold sterilization. |
| 21 Group translocation. | |

(9 × 1 = 9 weightage)

III. Short Essay or Paragraph Questions. Answer any *five* questions :

- 22 Gram staining procedure and principle.
- 23 Electron transport chain.
- 24 Explain Embden Mayorhof pathway.
- 25 Methods used for microbial growth measurement.
- 26 Mycotoxins.
- 27 Enumeration and cultivators of viruses.
- 28 Typhoid fever.

(5 × 2 = 10 weightage)

IV. Essay questions. Answer any *two* questions. Explain the following :

- 29 Nutritional classes and nutritional grouping of baacteria
- 30 Describe factors influencing microbial growth.
- 31 Describe the ultrastructure of bacteria.

(2 × 4 = 8 weightage)